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## A COLEOPTEROUS CONUNDRUM. BY ANNIE TRUMBULL SLOSSON.

A year ago, May 1902, I had a peculiar entomological experience. I had returned from Florida to my home in New York about the middle of April, had spent two or three weeks arranging and classifying my captures of the winter, sending off duplicates and doubtful species to specialists, and preparing my collection for the summer months of my absence. A full fortnight must pass before I should leave town for my New Hampshire summer home, and I already pined for a little collecting. Suddenly I recalled the existence of some old boxes of insects which had been crowded out of my regular collection-room some years before. They were in a closet opening from a hall on the second floor. This closet had been built especially for the preservation of woollen clothing and its protection from ravages of the devouring moth, its walls, shelves and drawers being made of red cedar. But after a period of many yearsnearly forty, I think—the wood has lost its protective odour, and the place is often visited by insect pests. It, however, still bears the name of the "cedar-closet," and here had been stored for several years the overflow from my collection. In a leisure hour, one chilly May day, feeling a touch of the entomologist's fitful fever, I said to a friend, in a sportive mood, "I am going to try the cedar-closet, who knows what discoveries I may make in those old boxes of bugs?" As unconscious of the great discovery awaiting me there as was probably Isaac Newton before that attractedly gravitating apple fell to the ground, I started on my quest. The first box I opened contained lepidoptera from Franconia, chiefly moths, taken several years before, and of little value or rarity. It was a wreck, clouds of dust rose from it as I lifted the cover, and broken bits of wings and bodies rolled about as I moved the box. Disagreeable, stealthy Anthrenus larvæ, of all sizes, glided about among the ruins. Of course this must be attended to, and the infested specimens thrown away; so I carried the box with its contents to my room for further examination,

There was a little fire burning in a low grate, and into this I began throwing the insect debris. As I tried to pick up some of the slippery Anthrenus larvæ I noticed among them what seemed to be tiny brown ants. I had never seen any ants in the cedar-closet, so wetting my finger I lifted one of the little creatures and dropped it into a poison bottle. When it was quiet I took it out and examined it with my magnifying It was no ant, but-what was it? I had never seen anything resembling it. Indeed, for a time I was not sure even to what order it belonged. Was it hemipterous, hymenopterous, coleopterous, or what? I put a half dozen specimens into the bottle, and a little later mounted two of them on a card triangle and sent them to Mr. Liebeck, in Philadelphia, for identification. At this juncture I felt no excitement, not much curiosity. Though quite unfamiliar to me, the species was probably well known to experienced entomologists as a museum pest; thus I thought to myself. But next day came a postal from Mr. Liebeck. He did not recognize my capture; had seen nothing like it; had it not been introduced with some of my specimens from South Florida? he asked. "It is a very curious insect, apterous, you see. Though provided with jaws and elytra, the usual characteristics of coleoptera, its antennæ seem very peculiar ones for a beetle. But I will examine it further and report." Thus he wrote, and I began to feel the first thrill of interest. This certainly could not be a familiar museum pest if such an experienced entomologist as Mr. Liebeck failed to recognize it. I went back to my box of infested moths and sought more specimens of the cunning little pest, securing about twenty specimens. These I carried with me to the mountains when I went there the latter part of May. Soon after my arrival in Franconia I sent specimens to Mr. Frederick Blanchard, and he wrote concerning them: "These beetles are very queer indeed; I haven't at present the slightest idea what they are related to. They reminded me at first sight of certain small Hemiptera. I hope to send you something further about them before very long."

A fortnight later Mr. Blanchard wrote again: "The very remarkable little beetle which you found devouring your specimens with Anthrenus is still an interrogation. I can, so far, find nothing at all like it in any of my boxes. A week ago I sent sketches with details, asking Henshaw's aid, but I haven't a word from him yet. The beetle is so very peculiar it should be easily identified if well known. The antennæ appear to be entire and alike in both specimens, but with only nine joints, 3-5 being

rather difficult to count, they are so small. One of the long joints is shorter than the others, but I don't recall whether it is the 7th or 8th. This is a very peculiar form of antenna, and would still be so if there were the normal number of eleven joints. Your insect is furnished with a single ocellus between the eyes, which is a very rare character in beetles. Some Dermestidæ have one ocellus, and in the Homalini of the Staphylinidæ there are two somewhat distant ones. The only other instance I have been able to find is in the case of Hylotomus bucephalus, from Sierra Leone, belonging to the family Paussidæ, which is not represented in this country. Here there are again two ocelli. I shall probably hear from Cambridge in a day or two, and will write you again." A few days later he wrote: "I heard from Henshaw yesterday. Like myself, he is unable to furnish any clue at all to the beetle's relations. I think that all that can be said of it is that it is a member of the great Serricorn series, which includes such a variety of types. In the Leconte and Horn Classification this embraces families XXXIX.-LI., but Casey (Jour. N. Y. Ent. Soc., Vol. VI., p. 76) is inclined to go further and add several other groups, hitherto considered Clavicorn. Just where your beetle comes in I can't say. The whole arrangement of the Serricornia would have to be carefully studied first, as it does not appear that your anomaly belongs to any recognized family." I had, in one of my letters to Mr. Blanchard, spoken of the varied contents of the cedar-closet in which the puzzling pest was found, and hinted jocosely that the presence of some ancient Egyptian relics, mummy wrappings, beads and images of Osiris, might possibly account for this strange visitant. He writes: "I note your playful remarks about a possible relation to ancient Egyptian dynasties, disclosed from the tombs of the Pharaohs and starting upon a new career of uselessness, and am reminded of the stories of still fertile seeds of grain reported to have been taken from tombs in the land of the Nile."

In the meantime I had sent specimens to Messrs. Schwarz and Fall. The former was too busy just them to reply, but I heard through others that he was unable to throw any light on the matter. Mr. Fall wrote: "I have just received your letter and the box containing specimens of that most astonishing little creature found eating your specimens in New York. I would like much to know the circumstances a little more exactly. Were the specimens attacked native or exotic? If native, were they from Florida? And how long had they been in the box? Could they have found access from any other source in the closet itself? I feel sure that

the beetle is not a member of our fauna. I saw Mr. Schwarz in Washington, and asked him if he had located your find. He said he could make nothing of it. I shall at once send one, at least, of the specimens to Dr. Sharp, and will promptly report to you what he says. An attempt to place it with our classification gives only negative results, but it certainly possesses as many points in common with the Lymexylidæ as with any family which we have. But that frontal ocellus!! And those antennæ!!! I hope to study it further soon." A few weeks later Mr. Fall wrote again. and, referring to what he calls "your conundrum which none of us can guess," he said: "I sent a specimen to Dr. Sharp, of Cambridge. England, and have to-day received a letter from him, in which he admits never having seen anything like it. There is nothing at all resembling it in the Palearctic fauna, he says. He doesn't know what family to assign it to, but suggests that it may belong to the Dermestidæ, on the strength of the frontal ocellus. The mystery deepens. The creature is such a ghostly, unsubstantial thing for a beetle-a regular coleopterous ghoulthat I almost find myself wondering if, when I look in the box again, I won't find it vanished into thin air. Did you find it actually feeding on the specimens? Was there sign of larvæ? Pardon my numerous questions, but the case is so remarkable that I would get all possible information. We must, perhaps, put some coleopterous Sherlock Holmes on the trail to run this fellow down." After another letter from me he writes: "The fact that you found numerous larve of Anthrenus in your box of moths would certainly account for the damage done, but the further fact of shaking these little creatures from the bodies of the moths would indicate that they themselves were not entirely guiltless. I suppose the age and character of the box is such that the beetles could not possibly have come from its wood or lining? Well, I give it up." And there my story practically ends.

Before I left New York in May I had bottled all the specimens I could find in the infested box and returned it, with its debris of half-devoured insects, to the cedar-closet. There also were at least a half dozen similar boxes containing insects, all infested by Anthrenus, and possibly other pests, but not one of the little anomalous creatures could be found among these. On my return in October I at once opened the closet and examined my "traps" with their tempting bait. Not a sign of the curious beetle was there. Nor has it ever reappeared. My little stock obtained a year ago is much diminished, I having sent specimens to various correspondents. Shall I ever find more specimens of what I have sometimes,

in chat over my discovery, styled *Ignotus anigmaticus?* I trow not. For me—a woman, and therefore, of course, full of vain imaginings—those creatures had no beginning; no egg, grub or pupa preceded them; no weary, slow-paced evolutionary process developed the strange little beings. They sprang into full, perfect imago life in those May days, having no family, no relations, belonging to no class, their secret to be unlocked by no key, artificial or natural; unfathomable mysteries, unsolvable problems, unguessable conundrums. Was it to confound the wise they came? to fulfil a prophecy I find in a certain old book, "Then shall the seers be ashamed, and the diviners confounded"?

## BUTTERFLY NOTES FROM TORONTO FOR 1902. BY J. B. WILLIAMS, F. Z. S.

On the 24th of May I went collecting, with a friend, in High Park. We each took a specimen of the Tailed-Blue (L. comyntas), but found, as we had expected, that it was too early for Scudder's Blue. On turning over an old boot that was lying on the grass, I saw a chrysalis of L. Scudderii attached to the under side; an ant was also on the sole of the boot, and ran round and round and over the chrysalis several times before going away; being, apparently, quite agitated by the disturbance. Is it possible that this ant was keeping some sort of guard over the chrysalis, as ants are supposed to do over the larve of L. Scudderii? Its presence on the boot may have been merely accidental, but still, its movements gave one the impression that it was loth to leave the chrysalis, and would have liked to carry it away, if that had been possible.

A slight touch removed the pupa from the boot, and I kept it until the 30th of May, when the butterfly emerged, and proved to be a female.

On September 20 and 27 I collected in two places where large numbers of the Clouded Sulphur (*Colias philodice*) were flying about, and noticed a good many of the white female form. I took five of them, altogether, and saw several more that I did not capture.

In 1901, I do not remember seeing a single white specimen. Is it right to speak of these females as albinos, at any rate, in the ordinary sense in which that word is used? Mr. Grote suggested, in the Canadian Entomologist for April, 1902, the probability of the dark female form "glaucus" of *Papilio turnus*, being a recurrence of the colour of an earlier species from which it had been derived; as female butterflies generally represent the conservative element, and males the liberal or progressive side, of insect life.